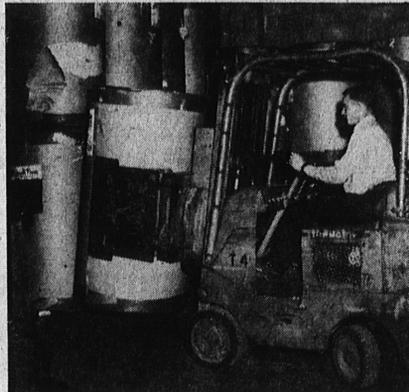


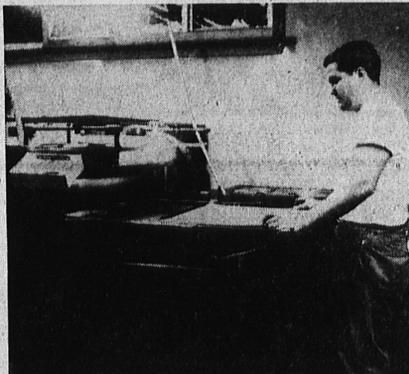
# 64-Page Press Now Prints Herald



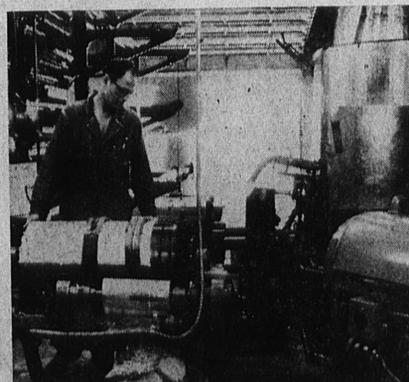
TRUCKLOAD OF NEWSPRINT from Canadian mills arrives at The HERALD plant, 1619 Gramercy after being picked up at docks in San Pedro. The rolls vary in weight from 550 to 1550 pounds.



FORK LIFT stores newsprint (in some cases three up) in press room. Pictures below and to the right show sequence of printing process from rolls into complete newspapers.



MATRIX IMPRESSION of type is made on roller press where pressures of 2,000 pounds per square inch are exerted in bringing out full detail of smallest type. Gene Nourse, foreman, is operating the roller.



NEW STEREOTYPE metal furnace in background which casts semi-cylindrical plates for use on the press. Shown in foreground is Sta-Hi mat former.



NEW CURVED PLATE ROUTER. Operator cuts high spots off plates to improve printing characteristics of curved plate. This is the final finishing process before plates are placed on the press.



## New Installation Sets Paper For Future Area Development

Pictured on this page is the HERALD'S newly installed 64-page rotary press and other equipment used in the final processes of producing your hometown newspaper. Already in use, the huge Goss press will keep The HERALD abreast of the Torrance area development for many years to come.

Similar to most other newspaper rotary presses, The HERALD'S new equipment has been modified to provide more versatile color facilities. For instance, it can produce a 16-page comic section in full color and up to 64 pages in black. Its two folders finish fold and count the papers ready for delivery to The HERALD'S small army of 115 carrier boys who cover 129 routes.

The press is manned under contract between The HERALD and the San Pedro-Wilmington Printing Pressmen and Assistants' Union No. 272 with Bob Davies, veteran rotary pressman, as superintendent.

Installation of the press marks another milestone in the progress of The HERALD which was established 43 years ago. The present publisher acquired the newspaper in 1954. At that time the paper was produced on two 16-page straightline rotary presses that had been twinned to make possible production of a maximum of 32 pages in black only. At the time of its installation in 1948 by the late Grover Whyte, the equipment was considered adequate for many years to come.

**An Old Process**  
Although modern printing is a far cry from that used by Gutenberg in the middle of the Fifteenth century, it still basically is the process of pressing or squeezing paper or similar material against type that has been inked.

The three principal methods of printing are: (1) letterpress-relief or raised printing; (2) gravure or intaglio-below-the-surface printing, the opposite of letterpress; and (3) lithography-printing from a flat surface, largely a chemical process. (Offset printing as done by the Automatic Printing Co. in Torrance is a modification of lithography.)

**Letterpress Printing**  
Almost all newspapers today are printed by letterpress.

The term "press" comes from the primitive screw type wine press used by Gutenberg and other early printers which were used well into the nineteenth century.

Power driven presses were invented in the early years of the last century, but major improvements lagged until about 1890 awaiting the development of electric power and invention of the stereotype process.

Some persons know about the cylinder press only, which is widely used for printing small newspapers and for commercial printing. Principal parts of the cylinder press are a revolving cylinder and reciprocating bed. The bed, upon which the type forms are placed, moves back and forth as the cylinder carries the sheets around it. When the cylinder is "on impression" the paper is pressed down upon the inked type. As a rule, cylinder presses print only one side of the sheet at a time.

Larger newspapers are printed on rotary presses. The principle of printing is the same but the operation is done much faster and much more extensively.

**Press in Units**  
Rotary presses—like The HERALD'S new installation—are made of units, decked one upon another to form what might be called a four-story press. Each of these units is a printing couple. One printing couple prints on one side of the paper (or web) and the other printing couple prints on the opposite side.

Each couple consist of a plate cylinder, a series of rollers which transfer ink from the fountain to the plate cylinder and a fountain containing viscous ink. The plate cylinder and impression cylinder rotate in opposite directions. Curved stereotype plates are fastened securely on the plate cylinders while packing (generally referred to as "blankets" covers the impression cylinders. Blankets are made of cork, rubber or a very durable fabric having a total thickness of about 11/64".

As the paper passes in a continuous sheet between the plate cylinder, ink on the stereotype plate is pressed into the paper.

Ink is placed in a trough called a "fountain," in which a roller revolves. A knife blade extending across the width of the fountain, scrapes excess ink off the fountain roller, allowing only a thin film to remain. The flow of ink is regulated by turning a series of screws, called keys, which press on the knife blade.

A 1200 gallon tank feeds The HERALD'S press. Ink stored in the tank is pumped by electric motor from the tank into lines serving all fountains on the press.

**Paper in Rolls**  
Paper for rotary presses (known as newsprint) is wound at the mills in a continuous strip into rolls of varied sizes.

For The HERALD, rolls are in widths of 32.48 and 61 inches and are 36 inches in diameter. Newsprint for The HERALD is supplied on contract by the Powell River company of British Columbia in Canada.

These rolls are placed on roll arms at one end of the press from where ribbons of paper are led over steel guide rollers through the printing units, over other guide rollers and compensator rollers and into the folders.

Plate cylinders of The HERALD'S Goss press are four plates wide, each plate being 7/16 inch thick.

The press can be run "straight out," with duplicate plates for each page, or "collect" with only one plate used for each page. On a straight run each printing unit prints two copies of eight pages with every cylinder revolution while the number is reduced one half with the "collect" run. Thus The HERALD'S decker type press (containing four units) can print up to 32 pages "straight out" and 64 pages "collect." Guide rollers (also called "pipe" rollers) support the webs of paper as they are led through the press. Compensator rollers are adjustable, so that the distance that the web travels between the units and the folders may be lengthened slightly (up to a full page length) or shortened in order to register all pages properly.

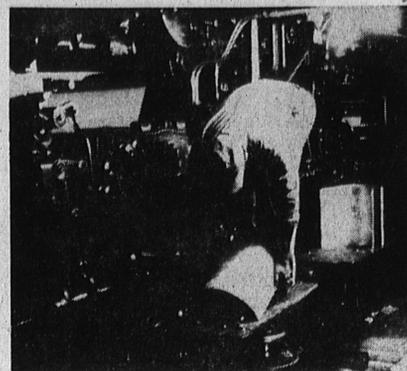
All rollers and cylinders in the press are absolutely parallel so that the webs will travel in a perfectly straight line. When the press is erected on concrete foundations, great care is taken in leveling.

**Folder is "Heart"**  
Although the printing is done by the units, the folder is the heart of the press. It receives the webs from all the units, then folds and delivers the strands in complete newspapers.

The folder first makes a longitudinal fold in the webs as they move down a triangular metal piece called the former. Then it severs page-lengths from the webs, makes a horizontal fold and delivers copies of the newspaper, counted in quantities of 25 and 50.

Strangely the rotary press does not print from type but rather from a plate of a molded impression of the type.

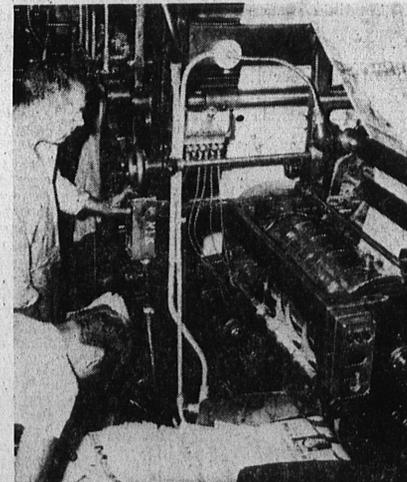
The type is first assembled, as it comes from the linotype and Ludlow machines, into steel frames or "chases," locked securely into place by set screws pressing against metal bars, squeezing to one corner. This and other processes are explained in pictures appearing on this page of other equipment newly acquired by The HERALD to complete the fascinating process of producing the completed newspaper.



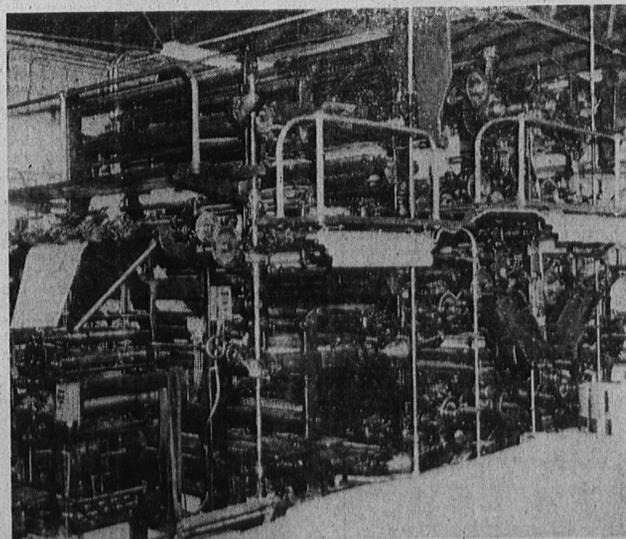
HEAVY DUTY WORK for the pressmen is the loading and locking-in of stereotype plates to the printing cylinders.



PUBLISHER KING WILLIAMS presses the starting button for the first run. With him are Jerome Feldman, president of Newspaper Equipment Services, erectors of the press, and Pressman Bob Davies.



PRESSMAN INSPECTS final product spilling from folder at speeds most persons find too fast to count.



READY FOR THE FUTURE... The HERALD'S new 64-page, multi-color press shown here is ready to deliver 18,000 collect copies of a completed edition of The HERALD each hour it is operating. The new press installation in The HERALD Building at 1619 Gramercy Ave. is indicative of this newspaper's faith in the future of the area, and gives The HERALD one of the best equipped community newspaper plants in the West.